WHAT IS CLAIMED IS

What is claimed is:

- 1. A method of generating a binary mixed raster content selector signal for image compression of a full color source image defined by a plurality of pixels comprising the steps of:
- (a) creating a multi-bit selector signal that encodes the direction and strength of edges;
 - (b) filtering the multi-bit selector signal; and
- (c) binarizing the filtered multi-bit selector to produce a binary mixed raster content selector signal.
- 2. The method according to Claim 1 wherein creating a multi-bit selector signal further comprises the step of determining if a pixel is pre-segmented as an 'Image' pixel.
- 3. The method according to Claim 1 wherein creating a multi-bit selector signal further comprises the step of determining if a pixel is white then multi-bit select signal equals strong background.
- 4. The method according to Claim 1 wherein creating a multi-bit selector signal further comprises the step of determining if a 3x3 neighborhood contains white then multi-bit select signal equals strong foreground.
- 5. The method according to Claim 1 wherein creating a multi-bit selector signal further comprises the step of determining if a pixel is black then multi-bit select signal equals strong foreground.

- 6. The method according to Claim 1 wherein creating a multi-bit selector signal further comprises the step of determining if the 3x3 neighborhood contains black then multi-bit select signal equals strong background.
- 7. The method according to Claim 1 wherein creating a multi-bit selector signal further comprises the step of determining if the 3x3 neighborhood contains exactly 2 classes of pixels then multi-bit select signal equals if the center class is darker then strong foreground else strong background.
- 8. A method of generating a binary mixed raster content selector signal for image compression of a full color source image defined by a plurality of pixels comprising the steps of:
- (a) creating a multi-bit selector signal that encodes the direction and strength of edges;
 - (b) filtering the multi-bit selector signal;
- (c) binarizing the filtered multi-bit selector to produce a binary mixed raster content selector signal;
- (d) determining if a pixel is white then multi-bit select signal equals strong background or foreground; else
- (e) determining if a 3x3 neighborhood contains white then multi-bit select signal equals strong foreground or background; else
- (f) determining if the pixel is black then multi-bit select signal equals strong

foreground or background; else

- (g) determining if the 3x3 neighborhood contains black then multi-bit select signal equals strong background or foreground; else
- (h) determining if the 3x3 neighborhood contains exactly 2 classes of pixels and the center pixel belongs to a darker class then the multi-bit select signal is strong foreground or background; else
 - (i) determining if the 3x3 neighborhood contains exactly 2 classes of

pixels and the center pixel belongs to a lighter class then the multi-bit select signal is strong background or foreground; else

- (j) multi-bit selector equals a weak signal.
- 9. A system for image compression of a full color source image defined by a plurality of pixels comprising:
- (a) means for creating a multi-bit selector signal that encodes the direction and strength of edges;
 - (b) means for filtering the multi-bit selector signal; and
- (c) means for binarizing the filtered multi-bit selector to produce a binary mixed raster content selector signal.
- 10. The system according to Claim 9 further comprising means for creating a multi-bit selector signal further comprises the step of determining if a pixel is presegmented as an 'Image' pixel.
- 11. The system according to Claim 9 further comprising means for creating a multi-bit selector signal further comprises the step of determining if a pixel is white then multi-bit select signal equals strong background.
- 12. The system according to Claim 9 further comprising means for creating a multi-bit selector signal further comprises the step of determining if a 3x3 neighborhood contains white then multi-bit select signal equals strong foreground.
- 13. The system according to Claim 9 further comprising means for creating a multi-bit selector signal further comprises the step of determining if a pixel is black then multi-bit select signal equals strong foreground.

- 14. The system according to Claim 9 further comprising means for creating a multi-bit selector signal further comprises the step of determining if the 3x3 neighborhood contains black then multi-bit select signal equals strong background.
- 15. The system according to Claim 9 further comprising means for creating a multi-bit selector signal further comprises the step of determining if the 3x3 neighborhood contains exactly 2 classes of pixels then multi-bit select signal equals if the center class is darker then strong foreground else strong background.